

Case Study

Manatee County constructs a new District Cooling Plant saving more than \$10 million

FPL Energy Services, Inc. (FPLES) partnered with Manatee County to develop a customized turn-key solution that reduces costs, minimizes risk, and benefits local businesses and residents. The improvements are guaranteed to save the County more than \$10 million over the 20-year contract period.

Project Scope

FPLES completed a detailed energy audit and analysis of nine occupied, multi-building facilities. Sites were chosen with County personnel to maximize the potential opportunity, consolidate chilled water production for the new 1,000 ton water cooled District Cooling Plant, and avoid conflicts with other planned capital improvement projects.

Solutions

The bundle of installed ECMs allowed the County to construct a new District Cooling Plant while still fitting within the 20-year life cycle cash flow required by Florida statute. Additional installed ECMs included:

- » Lighting upgrade
- » Water conservation
- » HVAC upgrades, including AHU replacement and controls
- » Transformers
- » Elevator modernization
- » Electric rate change
- » Consolidated metering
- » County-wide natural gas



Results

This project allowed the County to forego the expenditure of over \$3 million in planned capital improvements. And, by constructing the District Cooling Plant, the County can generate additional revenue by selling chilled water production to downtown businesses.

The project is guaranteed to:

- » Provide total cost savings of more than \$10 million over a 20-year period
- » Reduce annual energy consumption by 2,717,246 kWh, which is equivalent to eliminating the CO₂ emissions from burning 2,037,741 pounds of coal annually
- » Lower operations and maintenance costs
- » Save in excess of 20% per year compared with previous natural gas costs

Benefits

Saving Scarce Resources while Generating Revenue

Every kWh Manatee County saves reduces carbon emissions and helps protect the environment. In addition to the kWh savings, the new District Cooling Plant creates an opportunity for the County to consolidate chilled water production and allows downtown organizations to purchase cooling capacity from the County, providing an additional revenue stream.

Centralized chilled water benefits local users by offering an efficient air conditioning option for buildings without the need to own and maintain expensive equipment at each location. This further reduces carbon emissions and frees up capital for those businesses to invest.

Furthermore, by addressing problems with degraded HVAC systems and rental chillers on several County-owned properties, these buildings can now more easily be re-purposed or sold for higher asking prices.

No Up-Front Costs

By using a performance contract to implement conservation upgrades and construct a new District Cooling Plant, the County was able to fully finance all upgrades for energy-efficient equipment and FPLES guarantees the savings over 20 years.

As an industry leading Energy Services Company (ESCO), FPLES offers performance based guarantees to help maintain or reduce O&M budgets, while upgrading facilities. For more than 25 years, FPLES has delivered projects on time, on budget, and has never missed a savings guarantee.



Old, failing chillers were replaced with new, high-efficiency chillers on the roof of the newly constructed District Cooling Plant.

FPL Energy Services has provided energy efficiency, water conservation, and performance contracting solutions to state, municipal, and federal government and business clients for more than 25 years, with a commitment to excellence in the implementation of all performance contracts, large and small. We partner with each customer to first assess and identify specific needs, to design and build custom energy efficient solutions, and to guarantee the energy savings.

FPL Energy Services. Where proven meets possible.

Visit [FPLES.com/ESCO](https://www.fples.com/ESCO) or call 1-888-706-5685



FPL Energy Services, Inc. (FPLES) and FPL Services, LLC (FPLS) are unregulated subsidiaries of Florida Power & Light Company (FPL). Projects within FPL's electric utility service territory are provided by FPLS and not FPL. Projects outside of FPL's electric utility service territory are provided by FPLES and not FPL.